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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/567,506 | 07/12/2006 | Clemens Jung | 10191/4462 | 8952 |

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| EXAMINER | |
|---|---|
| OLSEN, LIN B | |
| ART UNIT | PAPER NUMBER |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/567,506 | JUNG ET AL. | |
| | Examiner | Art Unit | |
| | LIN B. OLSEN | 3661 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *07 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *11-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *11-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Information Disclosure Statement*

The information disclosure statement filed on February 6, 2006 does not fully comply with the requirements of 37 CFR 1.98(b) because: There is no copy of the reference X. Jiang, *Three dimensional Computer Viewing* or Foreign patent DE4301160A1. Since the submission appears to be *bona fide*, applicant is given **ONE (1) MONTH** from the date of this notice to supply the above mentioned omissions or corrections in the information disclosure statement. NO EXTENSION OF THIS TIME LIMIT MAY BE GRANTED UNDER EITHER 37 CFR 1.136(a) OR (b). Failure to timely comply with this notice will result in the above mentioned information disclosure statement being placed in the application file with the noncomplying information **not** being considered. See 37 CFR 1.97(i).

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims **11-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Pub. No. 2003/-22-725 to Harter Jr. at al. (Harter)

Regarding independent **claim 11**, "a vehicle system for operation in a motor vehicle, comprising:" - Harter describes deployment of an infotainment system in a vehicle (Abstract).

"an operator control for operating the vehicle system;" - The human machine interface (HMI) is described in paragraph 17 as allowing operation of the infotainment system.

"a controller unit operatively connected to the operator control, wherein the control unit influences operation of the vehicle system requested by the operator control; and" – A user discrimination control system influences the control of the infotainment system according to Harter Paragraph 23. The functionality of the user discrimination control system is incorporated in the HMI as shown in Fig. 4. It would

have been obvious to one of ordinary skill in the art at the time of the invention to integrate a system so closely associated with control system in the same controller.

"an access detection device for determining which one of vehicle occupants is accessing the operator control, the vehicle occupants including at least one of a driver and a passive passenger;" - In paragraph 22, Harter describes Proximity sensors 32 and 34 forming an IR curtain to detect the passenger accessing the operator control.

"wherein the controller unit influences operation of the vehicle system requested by the operator control at least depending on which one of vehicle occupants is accessing the operator control." – In Fig. 5B of Harter, the enhanced functionality of the infotainment system is allowed if a passenger is present and the IR curtain has detected that the passenger is controlling the interface for the vehicle system.

Regarding **claim 12**, which is dependent on claim 11, "further comprising: a motion detection device for determining a motion status of the motor vehicle, wherein the controller unit influences operation of the vehicle system requested by the operator control additionally as a function of a detected motion status of the vehicle." – In Fig. 5A block 63, the vehicle being in park is detected and enhanced functionality is allowed if the vehicle is parked.

Regarding **claim 13**, which is dependent on claim 11, "wherein the controller unit limits at least some operations of the vehicle system requested by the operator control if it is determined that the vehicle is in motion and the operator control is being accessed

by the vehicle driver." - In Fig. 5 of Harter, only base functionality is allowed when the vehicle is moving and there is no passenger, or if there is a passenger, they are not interacting with the controls.

Claims **14-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Harter as applied to claim 13 above, and further in view of U.S. Patent No. 5,983,147 to Krumm (Krumm). Krumm is concerned with vehicle occupant detection and classification.

Regarding **claim 14**, which is dependent on claim 13, "wherein the access detection device includes a video sensor system having an image-detection range that includes at least a driver seat and a front-seat passenger seat." - While Harter teaches using video sensors to monitor the driver (Fig. 3), it does not detecting a passenger using the same cameras. Krumm teaches taking a video of the front seat to see how the seat is occupied. It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute Krumm's video sensors for the weight sensors used in Harter to obtain the predictable result of determining whether a passenger was in the front seat.

Regarding **claim 15**, which is dependent on claim 14, "wherein the access detection device includes one of a stereo and multi-camera video sensor." - As shown in Krumm Fig. 4, Krumm uses multiple cameras to detect the passenger.

Regarding **claim 16**, "which is dependent on claim 15, wherein the access detection device takes into consideration the gray-scale value information contained in detected signals, in determining which one of the vehicle occupants is accessing the operator control." – Krumm in col. 3 lines 45-47 uses gray level mapping to improve the recognition of the cameras.

Claims **17-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Harter as applied to claim 13 above, and further in view of U.S. Patent Pub. No. 2005/0131607 to Breed (Breed). Breed is concerned obtaining information about the occupants of a vehicle.

Regarding **claim 17**, which is dependent on claim 13, "wherein the access detection device includes a radar sensor device." - - While Harter teaches using weight sensors and seat belt tensioners to determine if a passenger is present and an IR curtain to detect actions of the passenger, it does not mention using radar sensors. Breed, discussing general occupant sensors, uses transducers. In paragraph 90, he includes radar as a transducer that can be used for monitoring a passenger. It would have been obvious to one of ordinary skill in the art at the time of the invention to use Breed's radar sensor in place of the IR screen as a simple substitution of one known element for another to obtain predicable results.

Regarding **claim 18**, which is dependent on claim 13, "wherein the access detection device includes at least one depth sensor which utilizes the propagation time principle for detection." - While Harter teaches using weight sensors and seat belt tensioners to determine if a passenger is present and an IR curtain to detect actions of the passenger, it does not mention depth sensors. Breed at paragraph 853 suggests using ultrasonic sensors for detecting the passenger location because their slower propagation velocity makes measurement easier. It would have been obvious to one of ordinary skill in the art at the time of the invention to use Breed's propagation measurements in place of the IR screen as a simple substitution of one known element for another to obtain predicable results.

Regarding **claim 19**, which is dependent on claim 13, "wherein the access detection device includes at least one depth sensor which utilizes the laser scanner principle for detection." - While Harter teaches using weight sensors and seat belt tensioners to determine if a passenger is present and an IR curtain to detect actions of the passenger, it does not mention laser scanners. Breed at paragraph 60 suggests using laser transducers for detecting the passenger location instead of ultrasonic sensors because of the greater accuracy. It would have been obvious to one of ordinary skill in the art at the time of the invention to use Breed's laser scanning in place of the IR screen as a simple substitution of one known element for another to obtain predicable results.

Regarding **claim 20**, which is dependent on claim 13, "wherein the access detection device includes at least one depth sensor which utilizes the structured lighting principle for detection." - While Harter teaches using weight sensors and seat belt tensioners to determine if a passenger is present and an IR curtain to detect actions of the passenger, it does not mention structured light for detection. Breed at paragraph 65 suggests using structured light for analyzing the images to determine the passenger location. It would have been obvious to one of ordinary skill in the art at the time of the invention to use Breed's structured light analysis in place of breaking the IR screen as a simple substitution of one known element for another to obtain predicable results.

## ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent Pub. No. 2003/0023350 to Tan et al. for limiting a Driver's access to an accessory in a moving vehicle and U.S. Patent Pub. No. 2004/0181334 to Blumbergs et al. for limiting a driver's level of navigation system access in a moving vehicle.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LIN B. OLSEN whose telephone number is (571)272-9754. The examiner can normally be reached on Mon - Fri, 8:30 -5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lin B Olsen/
Examiner, Art Unit 3661

/Thomas G. Black/

Supervisory Patent Examiner, Art Unit 3661